



# SpareBank 1 Østlandet Green Bond Second Opinion

February 12, 2021

**SpareBank 1 Østlandet is Norway's fourth largest savings bank, established in 1845.** It is one of 14 independent savings banks in the SpareBank 1 alliance, Norway's second largest finance group in terms of assets. In addition to banking, investment and insurance services, the SpareBank 1 Østlandet offers real estate brokerage, accountancy, leasing and other financial services.

**SpareBank 1 Østlandet expects all proceeds raised from the first issuance to be refinancing and two-thirds will be directed towards the green building category.** Investors should be aware that all commercial and residential buildings built from 2012-2020 qualify under the framework. Cabins, airport buildings, gas stations, parking and heavily emitting industrial buildings are however excluded. Investors should note that risks exist that environmental benefits of eligible building projects are overestimated when reporting impacts under the framework.

**For projects related to forestry (requiring FCS or PEFC certification), renewable energy (solar, hydro, geothermal), transmission lines, and clean transportation (mostly car loans to electric cars) the bank has strong eligibility criteria** that are also aligned with the mitigation criteria and mostly aligned with the Do-No-Significant Harm criteria in the EU Taxonomy. Eligible projects within agriculture need to have a substantial positive climate impacts, and project categories are likely aligned with the EU taxonomy criteria. CICERO Green encourage the issuer to be ambitious when selecting the projects in this category.

**SpareBank 1 Østlandet has climate goals for the bank's operation, including science-based targets, has implemented the TCFD-guidelines and also includes climate risk assessment in the ESG due diligence.** The issuer is systematically training their personnel to improve the knowledge on environmental, climate and social issues. SpareBank 1 Østlandet conducts thorough ESG assessments that are included in the credit process, and clients must comply with the ESG-guidelines to be granted a green loan. CICERO Green assess that Sparebank 1 Østlandet seems to fulfil the minimum social safeguards of the EU Taxonomy, but that there is room for improvement to mitigate potential social risks in the lending portfolio.

Based on the overall assessment of the projects that will be financed under this framework, and governance and transparency considerations, SpareBank 1 Østlandet's green bond framework receives a **CICERO Medium green** shading and a governance score of **Excellent**. This despite the fact that the majority of the proceeds will be allocated to light green projects. The shading reflects that more than 30% of the proceeds will be allocated to projects that are well aligned with a low carbon future (forestry, clean transportation, and renewable energy), and the issuer's commitment to step up efforts to support renovation of existing buildings and willingness to go beyond regulation for new building projects.

## SHADES OF GREEN

Based on our review, we rate the SpareBank 1 Østlandet's green bond framework **CICERO Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in SpareBank 1 Østlandet's framework to be **Excellent**.



## GREEN BOND PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.





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# 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated February 2021. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence. CICERO Green has assessed potential alignment with the EU taxonomy of Nov. 2020 and provides comments where relevant on alignment with final TEG Report on the EU Taxonomy published in March 2020, see section on the Taxonomy for details of our approach.

## Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

### CICERO Shades of Green



**Dark green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



**Medium green** is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



**Light green** is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.

### Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



## 2 Brief description of SpareBank 1 Østlandet's green bond framework and related policies

SpareBank 1 Østlandet is Norway's fourth largest savings bank, established in 1845. The bank has branch offices across the counties of Innlandet, Viken and Oslo in Norway. It is one of 14 independent savings banks in the SpareBank 1 alliance and owns 12.4% of the jointly owned holding company SpareBank 1 Gruppen AS, Norway's second largest finance group in terms of assets. Total assets held by SP1Ø in 2020 was NOK 194 billion.

In addition to banking, investment and insurance services, the SpareBank 1 Østlandet also offers real estate brokerage, accountancy, leasing and other financial services. The bank's core values are proficiency, accessibility and dedication, and sustainability is central throughout the bank's operations. The client base is comprised of 73.9 % retail market and 26.1 % corporate market.

### Environmental Strategies and Policies

SpareBank 1 Østlandet has two main sustainability goals, outlined in their sustainability strategy; to promote sustainability in their markets and to integrate sustainability in their entire value chain. To achieve these goals, SpareBank 1 Østlandet plans to work with their customers to get a sustainable credit portfolio. A materiality assessment carried out in 2017 identified i.a. responsible lending and ethical marketing of products and services as areas where the bank can reinforce its positive sustainability impacts.

SpareBank 1 Østlandet is using the TCFD guidelines for assessing climate risks for the bank and their portfolio and summarized the first reporting in the 2018-annual report. The report identified that the bank is exposed to climate risk mainly through lending to the corporate market. The bank's two largest industries, real estate and agriculture, are identified to be the sectors most exposed to climate risks. The physical climate risks of the bank's buildings and operations are assessed to be limited; however, the bank focuses on climate adaptation where necessary.

In 2019 the bank developed due diligence/ESG-assessment within all relevant sectors, including for the sectors addressed in the green framework. According to the bank, roadmaps for a green transition (veikart for grønn omstilling/konkurranseskraft), stakeholder dialogue with relevant industry organisations and the TCFD-analysis have informed the development of the ESG-assessments.

The bank has a commitment to climate action and works to have the bank's own offices and operations climate neutral by 2050. They have developed a guideline and "Action plan for climate and climate risks" to reach this target. The bank is working to raise the employees' knowledge on climate issues, to make them aware of their impact on climate and the environment, both through their own actions and through their work at the bank. As a part of the bank's climate action and sustainability strategy, they have developed sustainable products for their clients, including green mortgages for environmentally friendly and energy-saving measures in new and existing homes as well as green car loans. The loans have a favourable interest rate for people who choose environmentally friendly solutions, e.g. to renovate or switch to more environmentally friendly energy sources. For agricultural customers, the bank is offering green agricultural loans with favourable terms to customers who want to install photovoltaic systems on the farm. Furthermore, the bank informs us that they developed a green mortgage for a new Zero Emission Neighborhood (ZEN) district in Elverum, Ydalir. The district will have from 500 to 800



housing units. All homes that are built must be better than a national TEK and are either passive houses or plus houses.

SpareBank 1 Østlandet has set science-based climate targets<sup>1</sup> for their offices and internal operations, i.a. a 3% annual reduction in energy consumption until 2025, a fully electric car park by 2025 and to reduce the emissions from waste by 50% within 2050 from the 2018-level. The bank is in collaboration with the Collective Commitment on Climate Action, working on a Science Based Target for their loan portfolio. SpareBank 1 has developed climate targets for several segments of their loan portfolio and is setting target for the different segments. Several of these targets are linked to the technical thresholds in the EU-taxonomy. As such, the ambition will depend on the final version of the EU Taxonomy.

SpareBank 1 Østlandet has been certified according to Eco-Lighthouse (Miljøfyrtårn) since 2008. Eco-Lighthouse sets criteria on environmental standards, and the bank uses the certification to improve the work with waste management, energy consumption, procurement, and transport. The environmental certification through Eco-Lighthouse is certified via an external, independent certification body. According to the bank, they have also taken on the Partnership for Carbon Accounting Financials (PCAF) in the work towards their clients, and intends to report their loan portfolio emissions according to this framework in the 2020 annual report.

SpareBank 1 Østlandet is reporting on scope 1, 2 and 3 greenhouse gas (GHG) emissions for all offices. In 2019 the total CO<sub>2</sub>eq-emissions were 449 tons, where the scope 2 and 3 emissions represented 52.6 and 45.1% respectively<sup>2</sup>. The total reduction of CO<sub>2</sub>-emissions from 2018 to 2019 was ca 18.8%, mainly due to reductions in use of fossil fuels in transport and reduction in the consumption of electricity in self owned and rented buildings. The bank is also reporting emissions from their portfolio.

SpareBank 1 Østlandet has established Guidelines on sustainability in procurement, giving input to how negative effects on the environment can be minimised throughout the value chain, including energy, water, and minimising greenhouse gas emissions in production and transport. An example of the impacts of the procurement guidelines is the replacement of company fossil fuel cars with electric vehicles, in line with a fully electric car park by 2025. The bank is furthermore conducting an evaluation of existing suppliers to monitor the implementation of the Guidelines, and e.g. the suppliers' knowledge about the risk of negative impacts on the environment and social conditions in their operations and supply chain.

SpareBank 1 Østlandet are committed to several external initiatives and standards, including the UN Sustainability goals, the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles for Business and Human Rights, including minimum labor rights outlined in the ILO Conventions, and the UNEP FI Principles for Responsible Banking and Collective Commitment on Climate Action.

### Use of proceeds

Eligible assets under the green finance framework include projects and assets that target the mitigation of climate change and protection of healthy ecosystems within the categories green buildings (ca 67%), environmentally sustainable management of living natural resources (ca 14%) renewable energy (ca 6%) and clean transportation (ca 13%). SpareBank 1 Østlandet intends, on a best effort basis, to comply with the EU Taxonomy for the categories within its eligibility criteria.

SpareBank 1 Østlandet expects all of the proceeds to be allocated to refinancing. New eligible loans will be added over time to the portfolio. Within its allocation report, the bank will report on the % of new loans that have been

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<sup>1</sup> <https://sciencebasedtargets.org/>

<sup>2</sup> Scope 1 emissions 10.8 tCO<sub>2</sub>eq (transport), scope 2 emissions 236 tCO<sub>2</sub>eq (electricity and district heating) and scope 3 emissions 202.3 t CO<sub>2</sub>eq (flights and waste). Emissions include 29 departments and the head office.



added to the portfolio during the last year and bank will be informed on the % of existing versus new loans added to the eligible pool.

The bank is excluding from their portfolio fossil energy, nuclear power mining, timber from illegal logging/forestry contributing to deforestation or removal of protected forests, large-scale steam projects, wind power on land, companies that conduct lobbying against a necessary transition to a low-emission society, projects/companies related with arms, tobacco, or pornography. Proceeds will normally finance projects in the region where the issuer operates. According to the issuer, they may in rare cases take on minor projects outside their area if they are in line with the bank's strategy. Examples are when they the relevant SpareBank 1 does not have the particular sector in its portfolio.

### **Selection**

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Loans financed or refinanced through the green bond proceeds are evaluated and selected for inclusion in the eligible pool by SpareBank 1 Østlandet's employees based on compliance with the eligibility criteria. When assessing prospective eligible green loans, SpareBank 1 Østlandet may rely on analysis provided by external parties in addition to its own assessment.

The eligible green loan portfolio must also align with SpareBank 1 Østlandet's internal sustainability codes and policies. The bank conducts ESG-assessments for all loans, except mortgages, larger than 1 mill NOK, and the assessment is integrated in the credit process. The ESG assessments requires client officers to assess loan applicants' sustainability governance, also taking into account sustainability risks which are defined for a number of specific sectors, and clients' preparedness to address these risks. As a part of the ESG-assessment the bank will ask potential clients questions related to e.g. whether the project/property has been adapted to the climate changes expected in their local area, if they have an understanding of whether the project affects vulnerable eco systems like wetlands, and if they follow national legislation related to HSE (health, safety and environment). The result of the assessments is a part of the credit process and may lead to escalation of the application to the credit committee and in some cases result in loan applications not being granted.

The credit process incorporates the bank's list of excluded sectors, which include fossil energy, including coal, oil and gas, nuclear power, mining operations, large-scale dam projects, illegal logging, and wind power. The bank informs that they have not yet introduced a systematic approach to avoiding lock inn effects, however, fossil fuel investments where the lock in potential is most relevant are excluded from the bank's loan portfolio.

SpareBank 1 Østlandet has established a Green Bond Committee (GBC) that has members from relevant business areas including corporate banking, retail banking, SpareBank1 Finans Østlandet AS, treasury and sustainability. The GBC has prepared the Green Bond Framework and its role is to ensure that projects selected are aligned with the company's sustainability strategy as well as with the eligibility criteria outlined in the Framework. According to the issuer, decisions are consensus based, and if a loan does not comply it will not be included in the green portfolio.

### **Management of proceeds**

CICERO Green finds the management of proceeds of SpareBank 1 Østlandet to be in accordance with the Green Bond and Loan Principles. The company intends to allocate an amount equal to the net proceeds from the issue of green bonds to a green loan portfolio, selected in accordance with the eligibility criteria and the use of proceeds. SpareBank 1 Østlandet will strive to achieve a level of allocation for eligible green loan portfolio matching or



exceeding the balance of net proceeds from the outstanding green bonds. Additional eligible green loans will be added to the green portfolio to the extent required to ensure that an amount equal to the net proceeds from outstanding green bonds will be allocated to the eligible green loans. Proceeds will be allocated to a portfolio of disbursements.

Eligible loans will be included in the green loan portfolio at a periodic process. According to the bank, there is an annual (or more frequent) mapping of the green loan portfolio towards the screening criteria to “refill” the green loan portfolio as loans are being repaid, to keep volume (plus buffer). If a loan ceases to fulfill the eligibility criteria, SpareBank 1 Østlandet will remove the loan from the green loan portfolio and replace it when necessary for the balance. New loans replacing loans that are not fulfilling the eligibility criteria need to go through the same process as loans originally included in the green portfolio.

Pending allocation of an amount equal to the net proceeds of green bonds to a green loan portfolio, SpareBank 1 Østlandet will hold or invest in the company’s treasury liquidity portfolio, in cash or other short term and liquid instrument. Short term investments will be in line with the company’s guidelines for sustainability in liquidity management. Unallocated proceeds will be invested in eligible green, social or sustainable bonds according to the company’s sustainability guidelines and in line with best market practice.

## Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

SpareBank 1 Østlandet will report on the allocation of an amount equal to the net proceeds to the green loan portfolio and as long as data is available, report annually on the impact of the green loan portfolio at least at the category level. Reporting will be carried out annually until the maturity of the green instruments. The reporting will be carried out on an aggregated level for all green bonds and other potential green financing outstanding. Impact reporting will, on a best effort basis, be aligned with ICMA handbook for impact reporting.

Allocation reporting will provide information on the total amount of proceeds allocated to green loans, the number of eligible green loans, the balance of unallocated proceeds, the amount or percentage of new financing and refinancing.

**Impact reporting.** Where feasible, SpareBank 1 Østlandet intends to report on the impact of the green loan portfolio. The impact reporting may provide a description of relevant green loans, and the breakdown of the green loan portfolio based on what is being financed.

Relevant metrics for impact reporting are identified, including:

- Estimated annual GHG emissions reduced/avoided compared to baseline (tons of CO<sub>2</sub> equivalent)
- Sustainable agriculture land area (hectares and % increase in certified land areas)
- Conservation agriculture techniques / practices and relative output figure, if available
- Land restored (hectares and % increase in land restored)
- Sustainable forestry certified land area (hectares and % increase in certified land areas)
- Renewable energy capacity installed (GW or MW) and generated or expected (MWh)
- Number of fossil free vehicles funded (units per year) and estimated GHG emissions avoided compared to baseline (tCO<sub>2</sub>e)

The bank has informed us that they intend to obtain a limited assurance on the allocation report to ensure that the net proceeds of the green bonds will solely be allocated towards the eligible portfolio. Regarding impact, figures



will be calculated by an external experienced party which will also prepare a methodology report that will be made available to investors on the bank's website. The grid factor used will be the EU average grid factor. For the inaugural issuance, the bank aims to provide investors with pre-issuance impact reporting. The Green Bond Committee will be responsible for the green bond report. The bank informs that the report will be made available on the bank's website.



### 3 Assessment of SpareBank 1 Østlandet’s green bond framework and policies

The framework and procedures for SpareBank 1 Østlandet’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where SpareBank 1 Østlandet should be aware of potential macro-level impacts of investment projects.

#### Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in SpareBank 1 Østlandet’s green finance framework, we rate the framework **CICERO Medium Green**.

#### Eligible projects under the SpareBank 1 Østlandet’s green bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
<b>Green buildings</b>	Loans, credits and investments to finance and refinance new or existing residential, commercial or public buildings.	<b>Light Green</b>
	<p><b><u>Refurbished Residential and Commercial Buildings</u></b><sup>3</sup></p> <ul style="list-style-type: none"> <li>• <b>Refurbished buildings in Norway with an improved energy efficiency of 30%.</b> One of the two following criteria must be met:               <ul style="list-style-type: none"> <li>○ Refurbished Norwegian commercial and residential buildings with at least a 30% improvement in energy efficiency measured in specific energy, kWh/m<sup>2</sup>, compared to the calculated label based on building code in the year of construction.</li> <li>○ Refurbished Norwegian commercial and residential buildings with at least two steps of improvement in energy label compared to</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ The majority of the green bond proceeds for the first issuance (around 67%) is expected to be allocated to green buildings.</li> <li>✓ Renovation of existing buildings is key in order to succeed in the transition to a low carbon future. The 30% improvement criteria is good and aligned with science. It is also a strength that new buildings (2021 and onwards) in order to be eligible need to be 20 percent more energy efficient than required by regulations. Both these criteria qualify as medium green.</li> <li>✓ Investors should however be aware that all commercial and residential buildings built after 2012-2020 qualify under the framework. Most of the proceeds for the first issuance will be allocated to</li> </ul>

<sup>3</sup> All buildings directly heated by fossil fuels are excluded



the calculated label based on building code in the year of construction.

Where EPC labels are available to select eligible assets under this criterion, only labels of 'D' or better will be considered.

### **Green Residential Buildings**

#### **• Residential buildings in Norway (built between 2012 and 2021)<sup>4</sup>**

- Norwegian apartments that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17). Hence, built after 2012<sup>5</sup>.
- New or existing Norwegian other residential dwellings that comply with the Norwegian building codes of 2012, 2010 (TEK10) or 2017 (TEK17). Hence, built after 2012.
- Residential buildings built from the 1<sup>st</sup> January 2021 should be at least a 20% more energy efficient than regulation at time of construction.

#### **• Residential buildings in Norway (built before 2012)**

- Norwegian residential buildings built using older building codes than TEK10 for other residential dwellings with EPC-labels A and B. These buildings may be identified in data from the Energy Performance Certificate (EPC) database.

### **Green Commercial Buildings<sup>6</sup>**

#### **• Commercial buildings belonging to top 15% low carbon buildings in Norway<sup>7</sup>**

buildings that have only been built according to regulation at the time of construction. According to a report by Multiconsult these buildings are among the top 4-12 percent best performing on energy efficiency of the existing building stock.

- ✓ The issuer has confirmed that cabins, airport buildings, gas stations, parking and heavily emitting industrial buildings are excluded. Shopping centers are only included if they are reachable by public transportation.
- ✓ No buildings will be run on fossil fuel directly.
- ✓ The construction year will alone be used to identify eligible residential buildings. Since there is no requirement to provide evidence that the buildings are built according to the regulations, only to document construction year, there is no guarantee that the buildings comply with the regulation.
- ✓ The listed building certification criteria reflect a good environmental standard, however the points-based system of voluntary certifications like the LEED 'Gold' and BREAM 'Excellent' may not guarantee low climate impact. According to the issuer in-use certifications are not eligible.
- ✓ The building criteria are not in alignment with the draft delegated acts on the EU taxonomy (November 2020) for

<sup>4</sup> The Eligibility Criteria apply to buildings built until the 31<sup>st</sup> of December 2020. In accordance with the EU Taxonomy document, buildings built from the 1 January 2021 should meet the 'NZEB – 20%' criterion, meaning that the net primary energy demand of the new buildings must be at least 20% lower than the primary energy demand resulting from the relevant NZEB requirements. In Norway, NZEB has not yet been established. Therefore, SpareBank 1 Østlandet will apply the current Eligibility Criteria until there will be clear a definition of what NZEB ('Nearly Zero Energy Buildings') corresponds to in terms of regulation, within the Norwegian context. SpareBank 1 Østlandet intends to closely monitor regulatory developments regarding this topic and intends to apply the 'NZEB – 20%' criterion to buildings built from 1<sup>st</sup> January 2021, when there will be an exact definition of NZEB in Norway. Source: <https://www.epbd-ca.eu/wp-content/uploads/2018/08/CA-EPBD-IV-Norway-2018.pdf>

<sup>5</sup> Two-year lag between implementation of a new building code and the buildings built under that code must be taken into account. This means that all residential buildings finished in 2012 and later are all eligible for Green Bonds under this criterion. This is in line with the criteria as set by the Climate Bonds Initiative Standard and Guidance on Low Carbon Residential Buildings, <https://www.climatebonds.net/standard/buildings/residential>

<sup>6</sup> The Green Commercial Buildings definition excludes: airport buildings, gas stations, parking and in general heavily emitting industrial buildings. Shopping centers are included as long as they are located in areas that are reachable via public transportation, in order to allow for modal shift.

<sup>7</sup> The Eligibility Criteria apply to buildings built until the 31<sup>st</sup> of December 2020. In accordance with the EU Taxonomy document, buildings built from the 1 January 2021 should meet the 'NZEB – 20%' criterion, meaning that the net primary energy demand of the new buildings must be at least 20% lower than the primary energy demand resulting from the relevant NZEB requirements. In Norway, NZEB has not yet been established. Therefore, SpareBank 1 Østlandet will apply the current Eligibility Criteria until there will be clear a definition of what NZEB ('Nearly Zero Energy Buildings') corresponds to in terms of regulation, within the Norwegian context. SpareBank 1 Østlandet intends to



- Norwegian hotel and restaurant buildings that comply with the Norwegian building code, TEK10, TEK17 and later building codes<sup>8</sup>.
  - Norwegian office, retail and industrial buildings and warehouses that comply with the Norwegian building code TEK10, TEK17 and later building codes<sup>9</sup>.
  - Commercial buildings which received at least one or more of the following classifications: LEED “Gold”, BREEAM or BREEAM-NOR “Excellent”, or equivalent or higher level of certification and Nordic Swan Ecolabel.
  - Commercial buildings built from the 1<sup>st</sup> January 2021 should be at least a 20% more energy efficient than regulation at time of construction.
- acquisition and ownership of buildings which require an energy label level A to be aligned.
- ✓ The eligibility criteria are however mostly aligned with mitigation criteria for buildings given in the final TEG report on the EU taxonomy (March 2020) (provided that the certifications and level are approved by the Sustainable Finance Platform). The issuer has informed us that it is not a requirement to monitor the energy use in large non-residential buildings which the TEG report requires.

#### Environmentally Sustainable Agriculture<sup>10</sup>

##### Sustainable Management of Living Natural Resources and



- Loans to finance or refinance agricultural projects/activities with a substantial positive climate impact that do not deplete existing carbon pools.
- Loans to finance or refinance agricultural projects/activities with a farm sustainability plan with a substantial positive climate impact has been established based on yearly record of its climate performance (Landbrukets Klimakalkulator) advisory.
- All loans included in this category needs to meet KSL-standards, and have to have an ESG due diligence assessment.

#### Medium Green

- ✓ Financing sustainable agriculture will be an important contribution to a low-carbon society.
- ✓ KSL is ensuring compliance with Norwegian laws and regulation.
- ✓ For both categories in sustainable agriculture financing of fossil-fuel based farm equipment is excluded and livestock projects will not be funded.
- ✓ The agricultural sector is developing a tool called the climate calculator (Klimakalkulatoren) to assist farmers in getting a better overview of the emissions of greenhouse gases. It is a strength that the bank follows up with their clients in order to encourage the farmers to reduce their emissions by using the climate calculator.
- ✓ The bank informs that they are currently not selecting loans under this category.

closely monitor regulatory developments regarding this topic and intends to apply the ‘NZEB – 20%’ criterion to buildings built from 1<sup>st</sup> January 2021, when there will be an exact definition of NZEB in Norway. Source: <https://www.epbd-ca.eu/wp-content/uploads/2018/08/CA-EPBD-IV-Norway-2018.pdf>

<sup>8</sup> A conservative time lag between implementation of a new building code and the hotel and restaurant buildings built under that code is taken into account in Multiconsult’s technical report, hence all hotel and restaurant buildings finished in 2013 and later (3 year lag) are all eligible under this criterion.

<sup>9</sup> A conservative time lag between implementation of a new building code and the office, retail and industrial buildings built under that code is taken into account in Multiconsult’s technical report, hence all office, retail and industrial buildings finished in 2012 and later (2 year lag) are all eligible under this criterion.

<sup>10</sup> Financing of fossil-fuel based farm equipment is excluded.



### Sustainable Forestry

Loans to finance or refinance environmentally responsible forest management:

- Forest land certified in accordance with the Forest Stewardship Council (FSC) standards and/or the Programme for the Endorsement of Forest Certified (PEFC).

### Dark Green

- ✓ The bank informs that ca 14% of the proceeds is expected to be used within sustainable forestry.
- ✓ FSC and PEFC are internationally recognized forestry certification schemes.
- ✓ According to the IPCC, forests and land use represent important opportunities for controlling climate change.
- ✓ Fossil-fuel powered machinery for forestry will be excluded.
- ✓ Roads open to the public cannot be financed.
- ✓ The FSC and PEFC schemes are vague when it comes to alignment with the Taxonomy criteria related to establishment of a verified GHG baseline and demonstration of an increase in the forest carbon stock. To demonstrate alignment, the forest owners need to establish a baseline and demonstrate that carbon stocks have been maintained or increased against this baseline.

### Renewable Energy

Loans, credits and investments to finance and refinance the acquisition, development, operation and maintenance of renewable energy power plants, generation and transmission of energy from such renewable sources, and manufacturing of related technologies and equipment.



Loans may be for specific assets and projects or to 'pure play' companies, defined as enterprises which are expected to derive  $\geq 90\%$  of their turnover from assets aligned with defined eligibility criteria. For such enterprises, the entire loan principle is eligible for green bond funding, otherwise not at all.

- **Solar power:** Photovoltaic energy projects
- **Hydropower:** Small-scale hydropower projects (less than 25MW), and large-scale projects (more than 25MW) with either (i) life cycle emissions of less than 100g CO<sub>2</sub>/kWh or (ii) power density greater than 5W/m<sup>2</sup>.
- **Transmission systems:** Development of new, or improvement of existing, transmissions systems (or other infrastructure) to facilitate the integration of electricity from renewable energy sources into the grid.

### Dark Green

- ✓ The bank informs that ca 6% of the proceeds is expected to be used within renewable energy. According to the bank, there is no risk that assets or revenues are related to fossil fuels for pure play companies.
- ✓ Solar PV systems will be mainly rooftop installation. The bank informs that this category is not currently included in the green pool.
- ✓ New construction of small hydro can be financed, and refurbishment of large hydro can be refinanced. The largest hydropower plant currently in the portfolio is 9MW and the average size is 3MW.
- ✓ The bank informs that new power grids could be included, and that grids will be limited to the Østlandet region in Norway.



Clean		Dark Green
	<p>Loans to finance or refinance establishment, acquisition, expansion, upgrades, maintenance and operation of low carbon vehicles and related infrastructures:</p> <ul style="list-style-type: none"> <li>• <b>Low carbon vehicles:</b> Fully Electric, Hydrogen or otherwise zero-emission passenger vehicles</li> <li>• <b>Low carbon public and mass transportation:</b> Fully electric or hydrogen busses.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The bank informs that ca 13% of the proceeds is expected to be used within clean transportation.</li> <li>✓ SpareBank 1 Østlandet informs that loans to electric cars are most relevant for funding, with 97% being electric cars and the remaining electric cargo trucks/vans, busses and motorcycles.</li> <li>✓ Hybrid vehicles are not eligible.</li> </ul>

Table 1. Eligible project categories

## Background

In February 2020, Norway released updated targets for 2030 to cut emissions by 50-55% from 1990 levels<sup>11</sup>, and has outlined necessary steps to achieve this through the ‘Klimakur 2030’ document<sup>12</sup>. This document covers targets from the energy, land use, industrial processes and product use, agriculture, land-use change and forestry, and waste sectors. Norway is projected to miss its 2020 emissions reductions target by around 4.5 million tCO<sub>2</sub>e and needs fast action to reach the new 2030 goal.

Emissions reductions measures within road transport will make up about one-third of the total Norwegian non-ETS emissions reductions between 2021-2030. This includes the full electrification of personal vehicles and city buses by 2025, the transformation of 50% of the truck fleet being fueled by hydrogen or electricity, the increased use of biofuel for road transport, as well as improved logistics for trucks. Concurrent investments in charging infrastructure and battery technology for these vehicles are also necessary, as well as considerations for construction materials, operations and maintenance of road and rail infrastructure<sup>13</sup>.

Globally, agriculture, forestry and land use account for around 23% of total human activity caused greenhouse gas (GHG) emissions<sup>14</sup>. According to the emission projections from the Norwegian national budget 2020, 20% of GHG-emissions in the non-quota sector in the period 2021-2030 will come from agriculture. To reduce the emissions from the agricultural sector, Klimakur 2030 identified measures related to i.a. improvement of production and resource utilization in agriculture and carbon storage in soil<sup>6</sup>.

The Klimakur 2030 further mentions the need for energy efficiency measures in residential housing. The energy efficiency of buildings is dependent on multiple factors including increasing affluence and expectations of larger living areas, growth in population and unpredictability of weather, and greater appliance ownership and use<sup>15</sup>. All of these factors should be considered in the project selection process. Voluntary environmental certifications such as LEED and BREEAM or equivalents measure or estimate the environmental footprint of buildings and raise awareness of environmental issues. These points-based certifications, however, fall short of guaranteeing a low-climate impact building, as they may not ensure compliance with all relevant factors e.g., energy efficiency, access to public transport, climate resilience, sustainable building materials. CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

<sup>11</sup> <https://www.regjeringen.no/no/aktuelt/norge-forsterker-klimamalet-for-2030-til-minst-50-prosent-og-opp-mot-55-prosent/id2689679/>

<sup>12</sup> <https://www.miljodirektoratet.no/globalassets/publikasjoner/m1625/m1625.pdf>

<sup>13</sup> <https://energiogklima.no/kommentar/transport-klimakur-rapporten-lite-relevant-for-nokkelsektor/>

<sup>14</sup> [https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM\\_Approved\\_Microsite\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf)

<sup>15</sup> <https://www.iea.org/fuels-and-technologies/building-envelopes>



Norway's electricity supply is primarily composed of pump and storage hydropower (98%), with some natural gas. Power demand is estimated to increase by 5.8TWh to account for the electrification of many sectors towards 2030. In 2018, Norway produced 147 TWh of electricity and total consumption amongst all sectors was 136 TWh, while in 2030, it is expected consumption will increase to 159 TWh. Taking into account expansions in generation capacity from e.g., wind and hydropower, this will be well within Norway's expected generation capacity of 174 TWh. Electricity generation is expected to increase until 2022 due to investments in offshore wind power. This additional renewable energy capacity contributes to greater grid decentralization and localization, which enhances grid flexibility and resilience.

According to the IPCC, forests and land use represent important opportunities for controlling climate change. However, for forests to be a positive contribution to the environment and climate they have to be managed sustainably. Generally speaking, this means that if trees are harvested new ones should be replanted, that species should be suitable for the climate in which they grow (native) and that the rights of the people who live in or near forests should be respected. International standards such as the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) are often used as guidelines to ensure this. Investors should be aware that the environmental and social impact of forestry operations is highly location specific. The commercial harvesting of forests in Nordic climates (boreal) is different from temperate or tropical forests in terms of climate impacts as well as the vulnerability of native species and issues related to the rights of indigenous peoples. The national regulatory framework and enforcement levels also vary, with important implications for how sustainably forest companies operate. Norway can be considered low-risk countries from a sustainability perspective.

### EU Taxonomy assessment

In March 2020, a technical expert group (TEG) proposed an EU taxonomy for sustainable finance that specified mitigation criteria and "do no significant harm" (DNSH) criteria for eligible activities. The DNSH-criteria are developed to make sure that progress against some objectives are not made at the expense of others and recognizes the relationships between different environmental objectives<sup>16</sup>. In November 2020, EU published its draft delegated act to outline its proposed technical screening criteria for climate adaptation and mitigation objectives, respectively, which it was tasked to develop after it entered into law in July<sup>17</sup>.

We have assessed eligible projects in SpareBank 1 Østlandet's green framework against the mitigation criteria and the DNSH criteria in the draft delegated acts published in November 2020<sup>18</sup>. However, since the draft delegated acts have not been finalized at the time of the publication of this SPO, CICERO Green also provides comments where relevant on alignment with final TEG Report on the EU Taxonomy published in March.

DNSH-criteria are related to:

- climate change adaptation
- sustainable use and protection of water and marine resources
- transition to a circular economy
- pollution prevention and control
- control and protection and restoration of biodiversity and ecosystems

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<sup>16</sup> Taxonomy: Final report of the Technical Expert Group on Sustainable Finance, March 2020.

[https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy\\_en](https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy_en)

<sup>17</sup> [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy#ISC\\_WORKFLOW](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy#ISC_WORKFLOW)

<sup>18</sup> EU Taxonomy: Annex to the Commission Delegated Regulation, supplementing Regulation (EU) 2020/852, November 2020. [https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-da-2020-annex-1\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-da-2020-annex-1_en.pdf)

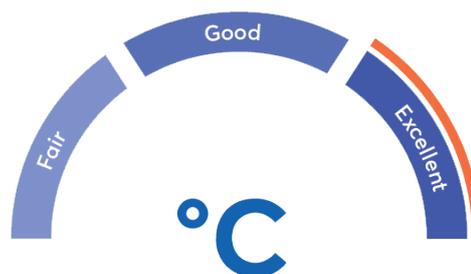


Relevant EU-Taxonomy activities are acquisition and ownership of buildings, agriculture and forestry, electricity generation from solar photovoltaic (PV) technology, geothermal power, and hydropower, transmission and distribution of electricity, urban, suburban and road passenger transport, and infrastructure for enabling low-carbon road transport.

In order to qualify projects under the EU Taxonomy, SpareBank 1 Østlandet has to ensure that their clients align with the relevant mitigation and DNSH-criteria as outlined in the EU Taxonomy for the different activities. Criteria, activities with NACE-codes and likely alignment are presented in Appendix 2. Further in order to qualify as a sustainable activity under the EU regulation 2020/852 certain minimum safeguards must be complied with. The safeguards entail alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation's ('ILO') declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights. CICERO Green has completed a light touch assessment of the above social safeguards with a focus on human right and labor right<sup>19</sup>. We take the regional and judicial context into account and focus on the most materials social risk for the issuer.

### Governance Assessment

Four aspects are studied when assessing the SpareBank 1 Østlandet's governance procedures: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



SpareBank 1 Østlandet has a high focus on sustainability and aims at integrating sustainability in their entire value chain. The issuer has clear climate goals for its internal operation, including science-based targets. The bank reports on scope 1, 2 and 3 emissions for the bank's operation, and emissions from their loan portfolio. SpareBank 1 Østlandet is using the TCFD analysis to assess climate risk. The bank does not yet have a systematic approach to Life Cycle Analysis and avoidance of all lock-in effects but has excluded the heaviest emitting sectors.

The bank has developed sector specific ESG assessments to be used in the credit process. These include climate risk, and a climate risk assessment is conditional on being granted a green loan. The results of an ESG assessment can lead to a loan case being escalated to the credit committee and in cases with non-compliance with the bank's ESG guidelines, lead to a rejection of the loan application. The issuer has informed us that the assessments are currently being completed for about a third of the cases<sup>20</sup> and for all green loans. Loans that do not comply with relevant ESG-guidelines cannot be included in the green loan pool. Furthermore, the bank is systematically training their personnel to improve their knowledge on environmental, climate and social issues to assist implementation of the ESG assessments.

Decisions on selections are based on compliance with the eligibility criteria which must be finally assessed by the Green Bond Committee. Decisions in the Green Bond Committee are made by consensus.

<sup>19</sup> CICERO Green is in the process of further developing its assessment method to ensure that it encompasses the object and purpose of the minimum safeguards.

<sup>20</sup> The assessments are required for all new loans over 1 million NOK.



CICERO Green assess that Sparebank 1 Østlandet seems to fulfil the minimum social safeguards of the EU Taxonomy, but that there is room for improvement to mitigate potential social risks in the lending portfolio. We also note that the issuers' operations are limited to a country "deemed to have robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the natural environment" as defined by the Equator Principles<sup>21</sup>, and which has ratified all fundamental ILO conventions<sup>22</sup>. Sparebank 1 Østlandet has publicly committed to following the OECD Guidelines for Multinational Enterprises. Social issues and safeguards are integrated into the issuers policies and strategies, and some key social issues are included in the ESG assessments for credit. However, it is unclear how the bank assesses and identifies customers that are to be considered high-risk, the thresholds for rejecting a client and the process for monitoring high risk clients, as the existing ESG-assessments do not sufficiently cover all social issues. The issuer has formulated expectation towards customers which includes respecting UN conventions on human and labour rights, including compliance with the ILO core conventions. We encourage the issuer to more clearly point out the issue of social dumping in their process, as this is a particularly relevant issue in high-income countries like Norway and a key concern in agriculture and construction. According to the issuer there is an ongoing process to strengthen this in the tool and integrate it into the digital loan process.

The overall assessment of SpareBank 1 Østlandet's governance structure and processes gives it a rating of **Excellent**.

### Strengths

The bank has a high awareness of issues related to sustainability, demonstrated i.a. through their goal to include sustainability in their entire value chain and a longstanding Eco-Lighthouse certification. The bank conducts materiality assessments to identify areas where the bank can reinforce its positive sustainability impacts. The bank also has an extensive reporting regime that includes emission reporting from its loan portfolio.

It is commendable that the bank started to report according to the TCFD-guidelines already in their 2018 annual report. The result of the TCFD is informing the bank's work on climate risk. Climate risk is also included as a part of the ESG assessment where the bank asks potential clients whether the project/ property has been adapted to the climate changes expected in their local area. This is conditional on being granted a green loan. The bank is likely aligned with the DNSH-criteria related to climate change adaptation, which is relevant for all EU activities in the bank's green framework.

For agriculture, forestry (requiring FCS or PEFC certification), renewable energy (solar PV, geothermal energy and hydropower), transmission lines, and clean transportation (zero emission vehicles and buses and charging infrastructure) the bank has strong eligibility criteria, that are likely well aligned with the EU's mitigation criteria. The climate change impacts of eligible agriculture projects depend on what type of projects that will be selected by the green bond committee. CICERO Green encourages the issuer to be ambitious when determining what could qualify as substantial improvement.

Further details on alignment with the EU Taxonomy are given in Appendix 2. Potential non-alignments are discussed under Pitfalls.

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<sup>21</sup> [The Equator Principles Association makes no independent assessment of each country's performance in these areas. As a proxy for such an assessment, the Equator Principles Association requires that a country must be both a member of the OECD and appear on the World Bank High Income Country list to qualify as a Designated Country. Full list <https://equator-principles.com/designated-countries>](https://equator-principles.com/designated-countries)

<sup>22</sup> ILO Ratifications for Norway  
[http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200\\_COUNTRY\\_ID:102785](http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102785)



### Weaknesses

Investors should note that risks exist that environmental benefits of eligible building projects are clearly overestimated in impact reporting under the framework. The issuer intends to use average energy demand for the existing residential building stock as reference for calculating impacts of funded buildings under the framework. There is no clear evidence that newer buildings directly replace older ones. In those cases where they do, emissions from demolition and construction should preferably be included in the impact calculations. Only half of all life cycle greenhouse gas emissions from a new building (e.g. TEK17) comes from heat and energy use, while approximately 40% comes from use of materials. Emissions directly associated with construction and demolition account for 2-5%<sup>23</sup>.

### Pitfalls

Renovation of existing buildings is key in order to succeed in the transition to a low carbon future. The most important issue when it comes to the real estate sector from an environmental perspective is what could be done to make the existing building stock more energy efficient. The 30% improvement criteria is commensurable and aligned with science. Also, the requirement for new buildings to be 20 percent better than regulation is ambitious. Both these criteria are aligned with the latest draft delegated act on the EU taxonomy. Most of the proceeds will however be allocated to buildings (not only residential but also commercial buildings) constructed the last decade without further ambition than regulation. The lack of energy use requirements that goes beyond regulation for existing buildings is a clear pitfall of this framework and allows for investments without clear environmental benefits. The eligibility criteria for existing buildings are however in line with the TEG report on the EU Taxonomy<sup>24</sup>, which states that the building must be within the top percent of the local existing stock in terms of operational Primary Energy Demand, expressed as kWh/m<sup>2</sup>y. New buildings in Norway are substantially more energy efficient than the existing building stock just by following regulation. According to Multiconsult residential buildings that qualify under the framework represent top 9 percent of the similar building stock when it comes to energy efficiency while eligible commercial buildings represent top 4-12 percent of similar building stock in Norway. Since only half of all life cycle greenhouse gas emissions from a new building comes from energy use, it is a risk that new buildings even if best in class on energy efficiency add significant emissions because of material use and construction emissions instead of reducing them over the lifetime of the building.

Based on information presented by SpareBank 1 Østlandet's framework is not aligned with the mitigation criteria in the draft delegated act on the EU taxonomy (November 2020 version) which states that existing buildings should at least have an Energy Performance Certificate (EPC) class A in order to be aligned. Furthermore, the energy performance in large non-residential buildings must be monitored and assessed to be aligned. The issuer has informed us that there is no requirement to monitor the energy use in large non-residential buildings in order to be eligible.

Forestry can make a positive contribution to climate change mitigation, but it can also lead to deforestation. The EU Taxonomy requires that a verified GHG baseline is established and that an increase in the forest carbon stock is demonstrated. The FSC and PEFC schemes are vague when it comes to these criteria. To demonstrate alignment, the forest owners need to establish a baseline and demonstrate that carbon stocks have been maintained or increased against this baseline.

If a company operating hydropower obtains and complies with the licenses issued by the relevant authorities, it is our interpretation that it is likely aligned with several of the requirements in the EU taxonomy DNSH-criteria related to sustainable water management and biodiversity considerations. It is however unclear to what extent the Norwegian hydropower regulation fully takes into account the EU taxonomy DNSH criteria in particular related to sustainable water management. According to the taxonomy, new hydropower developments need to complete a

<sup>23</sup> [Microsoft Word - Utredning av livsløpsbaserte miljøkrav i TEK 02.01.18 \(dibk.no\)](#)

<sup>24</sup> [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf)



cumulative impact assessment to ensure that the construction of the plant does not deteriorate the status of the relevant water body. Norwegian regulation includes a requirement for installation of fish passes for existing hydropower. However, there is no requirement to fence out fishes in old hydropower plants, as well as no requirements for turbines that prevent fish kill or for cumulative impact assessments for new hydropower developments.

SpareBank 1 Østlandet is likely not aligned with the DNSH-criteria for solar PV related to transition to circular economy, as they presently do not assess whether equipment used is of high durability and recyclability.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	SpareBank 1 Østlandet's Green finance framework, dated February 2021.	SpareBank 1 Østlandet's green finance framework from November 2020.
2	Annual report 2019, SpareBank 1 Østlandet	Annual report from 2019.
3	SpareBank 1 Østlandet, Sustainability strategy, 2019-2021	Giving guidance to SpareBank 1 Østlandet's work on sustainability
4	Guidelines and action plan for climate and climate risk SpareBank 1 Østlandet, adopted 09-12-2019	Show how SpareBank 1 Østlandet is working with and incorporating climate risk in the value chain.
5	SpareBank 1 Østlandet, General guidelines for corporate social responsibility and sustainability, dated 25-09-2020	To ensure responsible and sustainable business operations.



## Appendix 2: EU Taxonomy criteria and alignment

Complete details of the EU taxonomy criteria are given in [https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-da-2020-annex-1\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-da-2020-annex-1_en.pdf).

### Acquisition and ownership of buildings

Framework activity	Green buildings		
Taxonomy activity	Acquisition and ownership of buildings (NACE Code L68)		
	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation</li> </ul> <p><b>Acquisition and ownership of buildings, eligible if:</b></p> <ul style="list-style-type: none"> <li>For buildings built before 31 December 2020, the building has at least Energy Performance Certificate (EPC) class A.</li> <li>For buildings built after 31 December 2020, the building meets the criteria set out for the activity 'construction of new buildings'.</li> <li>Where the building is a large non-residential building it is efficiently operated through energy performance monitoring and assessment.</li> </ul> <p>For buildings built after 31 December 2020, buildings are eligible if:</p> <ul style="list-style-type: none"> <li>The Primary Energy Demand is at least 20 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation. The energy performance is certified using an Energy Performance Certificate (EPC).</li> </ul>	<p>According to the issuer, the following eligibility criteria apply:</p> <p><b><u>Refurbished Residential and Commercial Buildings</u></b></p> <ul style="list-style-type: none"> <li><b>Refurbished buildings in Norway with an improved energy efficiency of 30%.</b> One of the two following criteria must be met:               <ul style="list-style-type: none"> <li>Refurbished Norwegian commercial and residential buildings with at least a 30% improvement in energy efficiency measured in specific energy, kWh/m<sup>2</sup>.</li> <li>Refurbished Norwegian commercial and residential buildings with at least two steps of improvement in energy label compared to the calculated label based on building code in the year of construction.</li> </ul>               Where EPC labels are available to select eligible assets under this criterion, only labels of 'D' or better will be considered.             </li> </ul> <p><b><u>Green Residential Buildings</u></b></p> <ul style="list-style-type: none"> <li><b>Residential buildings in Norway (built between 2012 and 2021)</b> <ul style="list-style-type: none"> <li>Norwegian apartments that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17). Hence, built after 2012.</li> <li>New or existing Norwegian other residential dwellings that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17). Hence, built after 2012.</li> <li>Residential buildings built from the 1<sup>st</sup> January 2021 should be at least 20% more energy efficient than regulation at time of construction</li> </ul> </li> <li><b>Residential buildings in Norway (built before 2009)</b> <ul style="list-style-type: none"> <li>Norwegian residential buildings built using older building codes than TEK10 for apartments with EPC-labels A and B. These buildings may be identified in data from the Energy Performance Certificate (EPC) database.</li> </ul> </li> </ul>	<p>Not aligned with mitigation criteria for buildings built before 31 December 2020.</p> <p>Likely not aligned with the criteria related to energy monitoring and assessment.</p>



	<p><u>Threshold in the EU Technical annex from March 2020<sup>25</sup>:</u> Acquisition of buildings built before 31 December 2020:</p> <ul style="list-style-type: none"> <li>The calculated performance of the building must be within the top 15% of the local existing stock in terms of operational Primary Energy Demand, expressed as kWh/m<sup>2</sup>y.</li> </ul> <p>Acquisition of buildings built after 31 December 2020:</p> <ul style="list-style-type: none"> <li>The net primary energy demand of the new construction must be at least 20% lower than the primary energy demand resulting from the relevant NZEB requirements.</li> <li>Large non-residential buildings must have efficient building operations and must be ensured through dedicated energy management.</li> </ul>	<p><b><u>Green Commercial Buildings</u></b></p> <ul style="list-style-type: none"> <li><b>Commercial buildings belonging to top 15% low carbon buildings in Norway<sup>4</sup></b> <ul style="list-style-type: none"> <li>Norwegian hotel and restaurant buildings that comply with the Norwegian building code TEK10, TEK17 and later building codes.</li> <li>Norwegian office, retail and industrial buildings and warehouses that comply with the Norwegian building TEK10, TEK17 and later building codes<sup>26</sup>.</li> <li>Commercial buildings which received at least one or more of the following classifications: LEED “Gold”, BREEAM or BREEAM-NOR “Excellent”, or equivalent or higher level of certification and Nordic Swan Ecolabel.</li> <li>Commercial buildings built from the 1<sup>st</sup> January 2021 should be at least a 20% more energy efficient than regulation at time of construction.</li> </ul> </li> </ul> <p>According to the issuer:</p> <ul style="list-style-type: none"> <li>Energy efficiency is controlled through Energy label and construction year, and energy performance is not monitored.</li> </ul>	<p><u>March 2020 Technical annex:</u> Likely aligned, with the exception of energy management in large non-residential buildings built after 31 December 2020 provided that the certification level are approved by the Sustainable Finance Platform. Since e.g. LEED Gold does not include any absolute energy efficiency requirements this is uncertain.</p>
	<b>EU Taxonomy DNSH-criteria</b>	<b>Comments on alignment</b>	<b>Alignment</b>
Climate change adaptation	<ul style="list-style-type: none"> <li>Physical climate risks material to the activity should be identified (chronic and acute, related to temperature, wind, water, and soil) by performing a robust climate risk and vulnerability assessment.</li> <li>The assessment should be proportionate to the scale of the activity and its expected lifespan, such that:             <ol style="list-style-type: none"> <li>for investments into activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using downscaling of climate projections;</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer they are using the TCFD guidelines to assess climate risks for the bank. Climate risk is also included as a part of the ESG assessment where the bank asks potential clients whether the project/ property has been adapted to the climate changes expected in their local area. The bank informs that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds, and that having assessed the climate risk is conditional for being granted a green loan.</li> </ul>	Likely aligned.

<sup>25</sup>[https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf)

<sup>26</sup> A conservative time lag between implementation of a new building code and the office, retail and industrial buildings built under that code is taken into account in Multiconsult’s technical report, hence all office, retail and industrial buildings finished in 2010 and later (2 year lag) are all eligible under this criterion.



	<p>b) for all other activities, the assessment is performed using high resolution, state-of-the-art climate projections across a range of future scenarios consistent with the expected lifetime of the activity, including, at least, 10 to 30 years climate projections scenarios for major investments.</p> <ul style="list-style-type: none"> <li>The economic operator has developed a plan to implement adaptation solutions to reduce material physical climate risks to the activity. The adaptation solutions identified need to be implemented within five years from the start of the activity. These adaptation solutions do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of assets and of other economic activities and are consistent with local, sectoral, regional or national adaptation efforts.</li> </ul>		
<p>Protection and restoration of biodiversity and ecosystems</p>	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening should be completed in accordance with EU or national provisions.</li> <li>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive areas additional requirements apply:</li> </ul> <p>The building was not built on one of the following:</p> <p>(a) arable land and crop land with a moderate to high level of soil fertility and below ground biodiversity as referred to in the EU LUCAS survey<sup>27</sup>;</p>	<ul style="list-style-type: none"> <li>Construction of buildings will normally not require an EIA, as the area where the construction is taking place has already been made available for new construction in the municipality regulation plan.</li> </ul>	<p>Likely aligned.</p>

<sup>27</sup> JRC ESDCA, LUCAS: Land Use and Coverage Area frame <https://esdac.jrc.ec.europa.eu/projects/lucas>.



	<p>(b) greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species (flora and fauna) listed on the European Red List<sup>28</sup> or the IUCN Red List<sup>29</sup>;</p> <p>(c) forest land (whether or not covered by trees), other wooded land or land that is partially or wholly covered or intended to be covered by trees, even where those trees have not yet reached the size and cover to be classified as forest or other wooded land, as defined in accordance with the [FAO definition of forest].</p>		
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<sup>28</sup> IUCN, The IUCN European Red List of Threatened Species. <https://www.iucn.org/regions/europe/our-work/biodiversity-conservation/european-red-list-threatened-species>.

<sup>29</sup> IUCN, The IUCN Red List of Threatened Species. <https://www.iucnredlist.org>



## Agriculture

<b>Framework activity</b>	<b>Environmentally sustainable management of living natural resources and land use</b>		
<b>Taxonomy activity</b>	<b>Agriculture and forestry (NACE Code A1.1)</b>		
<b>Taxonomy version</b>	<b>EU Technical mitigation criteria</b>	<b>Comments on alignment</b>	<b>Alignment</b>
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation.</li> </ul> <p><b>Agriculture</b> Growing of perennial and/or non-perennial crops and livestock production; requirements:</p> <ol style="list-style-type: none"> <li>Protection of non-agricultural land with high carbon stock from land use change.</li> <li>Establishment of a Farm Sustainability Plan</li> <li>Compliance with essential management practices</li> <li>Farm records. The agricultural holding keeps a yearly record of its climate performance.</li> <li>Verification of the yearly records and the Farm Sustainability Plan</li> </ol>	<p>According to the issuer, the following eligibility criteria apply:</p> <ul style="list-style-type: none"> <li>Loans to finance or refinance agricultural projects/activities with a substantial positive climate impact that do not deplete existing carbon pools.</li> <li>Loans to finance or refinance agricultural projects/activities with a farm sustainability plan with a substantial positive climate impact has been established based on yearly record of its climate performance (Landbrukets Klimakalkulator) advisory.</li> <li>All loans included in this category needs to meet KSL-standards, and have to have an ESG due diligence assessment.</li> <li>Both perennial and non-perennial crops can be funded.</li> <li>Norwegian agriculture is regulated by the Land Act (jordlova). Cultivation of new land is regulated in the “forskrift om nydyrkning”, and includes a prohibition against cultivating wetland for agricultural purposes. It is however unclear whether exemptions from the regulation can lead to cultivation of wetland<sup>30</sup>.</li> <li>Pollution is regulated in the Pollution Control Act (forurensningsloven) and waste is regulated in the Waste regulation (avfallsforskriften).</li> <li>The KSL (kvalitetssystem i landbruket, KSL) requires the use of relevant Norwegian laws and regulations. Topics regulated in the KSL include to have a farm management plan, to keep records of the amount of i.a. fertiliser and pesticides used and management of protected areas, assets of cultural vale and biologically important resources (like wetlands).</li> <li>The Food Safety Authority is auditing the plan and records kept.</li> <li>According to the issuer, as a part of the ESG assessment the bank asks potential clients whether they have started to use the “klimakalkulator”.</li> </ul>	Likely aligned.

<sup>30</sup> [Rapport 2020 11 web - def.pdf \(cicero.oslo.no\)](#)



		The bank further informs us that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds.	
	<b>EU Taxonomy DNSH-criteria</b>	<b>Comments on alignment</b>	<b>Alignment</b>
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Sustainable use and protection of water and marine resources (water management)	<ul style="list-style-type: none"> <li>Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed, in accordance with a water use and protection management plan developed in consultation with relevant stakeholders.</li> <li>Implement the EUs Water Framework Directive (WFD).</li> <li>Where the activity involves water abstraction, a permit for water abstraction has been granted by the relevant authority for the activity, specifying conditions to avoid significant impact on water bodies.</li> </ul>	<ul style="list-style-type: none"> <li>Measures to avoid water contamination from i.a. spraying and fertilising is included in the KSL.</li> <li>Irrigation modernization is an example of eligible activities.</li> <li>According to the issuer, in their ESG assessment they ask potential clients whether they have implemented the KSL and if they have considered measures that reduce their effect on nature and vulnerable eco-systems. The bank informs that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds. It is unclear whether this is conditional on being granted a green loan.</li> </ul>	Likely aligned.
Transition to a circular economy	<ul style="list-style-type: none"> <li>Non-natural waste materials generated in the course of growing of nonperennial crops, unused agrochemicals or fertilisers, packaging or net wraps are collected by certified waste management operator and recycled or disposed, if hazardous or otherwise not recyclable. Natural (organic) materials and other suitable wastes (which may include pesticide washings) are used for agricultural benefit.</li> </ul>	<ul style="list-style-type: none"> <li>Storage of operational assets, pollution and waste management, including hazardous waste, is included in the KSL.</li> <li>Reduction in fertilizer use and collection and use of agricultural waste are examples of eligible activities.</li> <li>According to the issuer, in their ESG assessment they ask potential clients whether they have implemented the KSL. The bank informs that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds. It is unclear whether this is conditional on being granted a green loan.</li> </ul>	Likely aligned.
Pollution prevention and control (pollution)	<ul style="list-style-type: none"> <li>The application of nutrients (fertilisers) and plant protection products, including pesticides and herbicides, is targeted regarding time and area treated, is delivered at appropriate levels and with appropriate equipment and techniques to reduce risk and impacts of pesticide use on</li> </ul>	<ul style="list-style-type: none"> <li>Fertilizers are regulated in «forskrift om gjødselvarer», pollution is regulated in the «forurensningsforskriften» and pesticides are regulated in “forskrift om plantevernmidler”</li> <li>The KSL is regulating application of fertilisers, including spread of livestock manure.</li> <li>Reduction in fertilizer use and integrated pest management techniques are included as eligible activities.</li> </ul>	Likely aligned.



	<p>human health and the environment and of the loss of excess nutrients<sup>31</sup>.</p> <ul style="list-style-type: none"> <li>Measures are taken to ensure that the amount of livestock manure applied to the land each year, including by the animals themselves, is appropriate<sup>32</sup>.</li> <li>Only plant protection products with active substances that ensure high protection of human and animal health and the environment are used.</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer, in their ESG assessment, they ask potential clients whether they have implemented the KSL. The bank informs that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds.</li> </ul>	
<p>Protection and restoration of biodiversity and ecosystems</p>	<ul style="list-style-type: none"> <li>Activities ensure the protection of soil, particularly over winter, to prevent erosion and run-off into water courses/bodies and to maintain soil organic matter.</li> <li>Activities do not lead to the disturbance, capture or killing of legally protected species or the deterioration of legally protected habitats.</li> <li>Activities do not lead to the conversion, fragmentation or unsustainable intensification of high-nature-value land, wetlands, forests, or other lands of high-biodiversity value.</li> <li>For sites/operations located in or near to biodiversity-sensitive areas as well as other protected areas activities do not lead to the deterioration of natural habitats.</li> <li>The cultivation of alien species complies with the applicable rules regarding the risk, monitoring and safeguards<sup>33</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Pollution is regulated in the "forurensningsforskriften"</li> <li>Protected areas are regulated in the Nature Diversity Act.</li> <li>The KSL include requirements related to management of protected areas, assets of cultural value and biologically important resources (like wetlands).</li> <li>Rehabilitation of degraded lands is included as an eligible activity.</li> <li>According to the issuer, in their ESG assessment they ask potential clients whether they have implemented the KSL and if they have considered measures that reduce their effect on nature and vulnerable eco-systems. The bank informs that the ESG assessment is a requirement for all new loans over NOK 1 million used as proceeds.</li> </ul>	<p>Likely aligned.</p>

<sup>31</sup> Refer to Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p.71) and Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources.

<sup>32</sup> Does not exceed 170 kg N ha<sup>-1</sup> per hectare or different amounts in accordance with the conditions set out in Annex II to Council Directive 91/676/EEC7

<sup>33</sup> Refer to Regulation (EU) No 1143/2014 of the European Parliament and of the Council.



<b>Framework activity</b>	<b>Environmentally sustainable management of living natural resources and land use</b>		
<b>Taxonomy activity</b>	<b>Forestry (NACE Code A2)</b>		
<b>Taxonomy version</b>	<b>EU Technical mitigation criteria</b>	<b>Comments on alignment</b>	<b>Alignment</b>
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation.</li> </ul> <p><b>Forestry activities</b> Afforestation/Rehabilitation and restoration of forests/ Reforestation/Improved forest management/Conservation forestry; requirements:</p> <ol style="list-style-type: none"> <li>Afforestation plan/forest management plan: The area on which the activity takes place is covered by a long-term (10 years or more) afforestation plan developed prior to the start of the activity. The forest management plan or the equivalent instrument covers a period of 10 years or more, is continuously updated and describes a forest management system.</li> <li>Climate benefit analysis: The climate benefits analysis establishes a baseline, corresponding to the balance of GHG emissions and removals over a period of 20 years starting at the beginning of the activity, associated to the business-as-usual practices that would have occurred on the involved area in the absence of the afforestation activity, and provides an estimate of the long-term average GHG balance of those business-as-usual practices.</li> <li>Additionality: The additionality of activity is demonstrated. The demonstration provides evidence ensuring that the activity is not compulsory or customary and that, without the activity being accepted for financing as a sustainable investment</li> <li>Guarantee of permanence (non-conversion to other land use): The area on which the activity takes place is covered by a legal protection as defined by the national law, ensuring its non-conversion to other land uses. The operator of the activity commits that future updates to the afforestation plan and the subsequent forest management plan or equivalent instrument will continue to deliver climate benefits, as determined in point 2.</li> </ol>	<p>According to the issuer, loans can finance or refinance environmentally responsible forest management:</p> <ul style="list-style-type: none"> <li>Forest land certified in accordance with the Forest Stewardship Council (FSC) standards and/or the Programme for the Endorsement of Forest Certified (PEFC).</li> <li>Norwegian forestry is regulated by the Forestry Act (skogbruksloven) and protected areas are regulated in the Nature Diversity Act (naturmangfoldsloven).</li> <li>Most of Norway's forest estates are certified through the Norwegian version of PEFC. FSC is usually chosen by larger companies, whereas PEFC is the certification choice for most smaller enterprises.</li> <li>The FSC and PEFC certifications require that a forest management plan is implemented.</li> <li>The FSC and PEFC schemes are vague when it comes to the mitigation criteria related to establishment of a verified GHG baseline and the demonstration of an increase in the forest carbon stock. To demonstrate alignment with these criteria, the forest owners need to demonstrate that carbon stocks have been maintained or increased against a baseline.</li> <li>According to the issuer, they have guidelines prohibiting the use of timber obtained from organisations that are engaged in illegal logging activities. The operator of forest activities commits that future updates to the afforestation plan and the subsequent forest management plan or equivalent instrument will deliver climate benefits.</li> </ul>	Likely aligned.



	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Sustainable use and protection of water and marine resources	<ul style="list-style-type: none"> <li>Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed, in accordance with a water use and protection management plan developed in consultation with relevant stakeholders.</li> <li>Implement the EUs Water Framework Directive (WFD).</li> </ul>	<ul style="list-style-type: none"> <li>The FSC- and PEFC include measures to protect water sources.</li> </ul>	Likely aligned.
Pollution prevention and control (pollution)	<ul style="list-style-type: none"> <li>The use of pesticides is reduced and alternative approaches or techniques, which may include non-chemical alternatives to pesticides, are favored<sup>34</sup>, with exception of occasions where the use of pesticides is needed to control outbreaks of pests and of diseases. The activity does not use fertilisers.</li> <li>Well documented and verifiable measures are taken to avoid the use of hazardous ingredients<sup>35</sup></li> <li>Pollution of water and soil is prevented and cleaning up measures are undertaken when pollution occurs.</li> </ul>	<p>The FSC- and PEFC-certification require:</p> <ul style="list-style-type: none"> <li>that integrated pest management other biological measures shall be preferred to minimise the use of pesticides.</li> <li>where fertilisers are used, they shall be applied in a controlled manner and with due consideration for the environment. Fertilizer use shall not be an alternative to appropriate soil nutrient management.</li> <li>Inappropriate use of chemicals or other harmful substances or inappropriate silvicultural practices influencing water quality in a harmful way shall be avoided. Downstream water balance and water quality shall not be significantly affected by the operations.</li> </ul>	Likely aligned.
Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"> <li>In areas designated by the national competent authority for conservation or in habitats that are protected, the activity is in accordance with the conservation objectives for those areas.</li> <li>There is no conversion of habitats specifically sensitive to biodiversity loss or with high conservation value, or of areas set aside for the restoration of such habitats in accordance with national law.</li> <li>The afforestation/forest management plan includes provisions for maintaining and possibly enhancing biodiversity in accordance with national and local provisions.</li> </ul>	<ul style="list-style-type: none"> <li>Management of protected areas is regulated in the Nature Diversity Act (Naturmangfoldloven) (chapter 5).</li> <li>Under the Forestry Act all forest owners are obliged to map and have an overview of the environmental values (MIS – miljøregistrering i skog) in their forests, like vulnerable ecosystems, set out in an environmental plan (miljøplan).</li> <li>In the forest management plan (Skogbruksplan) potential vulnerable biological resources will be classified.</li> <li>The PEFC and the FSC-certification require high conservation values (like high concentration of vulnerable biodiversity) is maintain and/or enhanced through applying the precautionary approach. This is carried out through management plans.</li> </ul>	Likely aligned.

<sup>34</sup> Refer to Directive 2009/128/EC of the European Parliament and of the Council

<sup>35</sup> Components that are listed in the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade, the Minamata Convention on Mercury<sup>57</sup>, the Montreal Protocol on Substances that Deplete the Ozone Layer, and of active ingredients that are listed as classification Ia ('extremely hazardous') or Ib ('highly hazardous') in the WHO Recommended Classification of Pesticides by Hazard.



### Electricity generation using solar photovoltaic (PV) technology

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation using solar photovoltaic technology (NACE Code D 35.1.1 and F 42.22)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation.</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer proceeds will be used for mainly roof top solar PV systems.</li> <li>Solar PV is assumed to contribute substantially to climate change mitigation.</li> </ul>	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Transition to a circular economy (circular economy)	<ul style="list-style-type: none"> <li>The activity should assess availability of and, where feasible, use equipment and components of high durability and recyclability that are easy to dismantle and refurbish.</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer, they are not presently assessing whether equipment used is of high durability and recyclability.</li> </ul>	Likely not aligned.
Protection and restoration of biodiversity and ecosystems (ecosystems)	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening should be completed in accordance with national provisions.</li> <li>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for roof top solar systems.</li> </ul>	Not applicable.



Electricity generation from geothermal energy

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation using from geothermal energy (NACE Code D35.11 and F42.22)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation.</li> <li>Lifecycle GHG emissions from the generation of electricity from geothermal energy are lower than 100gCO<sub>2</sub>e/kWh<sup>36</sup>.</li> <li>Quantified lifecycle GHG emissions are verified by an independent third party.</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer, proceeds can be used for geothermal energy projects with life cycle emissions of less than 100g CO<sub>2</sub>e/kWh.</li> </ul>	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Sustainable use and protection of water and marine resources (water management)	<ul style="list-style-type: none"> <li>Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed, in accordance with a water use and protection management plan developed in consultation with relevant stakeholders.</li> <li>Within the EU; implement the EUs Water Framework Directive (WFD).</li> </ul>	<ul style="list-style-type: none"> <li>Generation of electricity is regulated under the Energy Act.</li> <li>If larger than a certain size, such facilities need a license from the Norwegian Water Resources and Energy Directorate (NVE) according to the “Energy Act” and the “Water Resources Act”.</li> <li>To receive a license the company needs to complete an EIA if needed under the Planning and Building Act, and to demonstrate alignment with the EU Water Framework Directive (WFD).</li> </ul>	Likely aligned.
Pollution prevention and control	<ul style="list-style-type: none"> <li>Abatement systems must be in place to ensure compliance with EU air emission requirements related to heavy metals and PAH<sup>37</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Directive 2004/107/EC is implemented in Norway through the Air Quality directive.</li> </ul>	Likely aligned.
Protection and restoration of biodiversity and ecosystems (ecosystems)	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening should be completed in accordance with national provisions.</li> <li>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive areas an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</li> </ul>	<ul style="list-style-type: none"> <li>Depending on the size of the facility and its impacts on nature and environment as given in the Planning and Building Act, an EIA is required to receive a license by NVE.</li> </ul>	Likely aligned.

<sup>36</sup> Lifecycle GHG emission savings are calculated using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.

<sup>37</sup> Directive 2004/107/EC of the European Parliament relating to arsenic, cadmium, mercury, nickel and PAH (polycyclic aromatic hydrocarbons) in ambient air.



## Electricity generation from hydropower

Framework activity	Renewable energy		
Taxonomy activity	Electricity generation from hydropower (NACE Code D.35.1.1 and F42.22)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<p>The activity complies with either of the following criteria:</p> <p>a) The life cycle GHG emissions from the generation of electricity from hydropower are lower than 100gCO<sub>2</sub>e/kWh<sup>38</sup>, declining to 0gCO<sub>2</sub>e/kWh by 2050.</p> <p>b) The power density of the electricity generation facility is above 5 W/m<sup>2</sup>.</p>	<ul style="list-style-type: none"> <li>According to the issuer Small-scale hydropower projects (less than 25MW), and large-scale projects (more than 25MW) with either life cycle emissions of less than 100g CO<sub>2</sub>/kWh or power density greater than 5W/m<sup>2</sup>.</li> <li>The issuer informs that they do not have large-scale projects (more than 25MW) in their portfolio, and that they are not planning to finance any large scale.</li> <li>Norwegian hydropower is assumed to generate electricity with life cycle emissions far lower than the given thresholds (3,3g CO<sub>2</sub>e/kWh) in the EU taxonomy<sup>39</sup>.</li> </ul>	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Sustainable use and protection of water and marine resources (water management)	<p>1: Operation of existing hydropower plants, including refurbishment activities to enhance renewable energy or energy storage potential are eligible if:</p> <p>Measures have been implemented to reduce adverse impacts on water and protected habitats. The effectiveness is monitored in an authorisation or permit. The operation of the hydropower plant complies with authorisation or permit issued by the competent authority, and sets out relevant mitigation measures necessary to:</p>	<ul style="list-style-type: none"> <li>The construction of energy production facilities larger than 1 MW needs a license from the Norwegian Water Resources and Energy Directorate (NVE) according to the “Energy Act” and the “Water Resources Act”. Mitigation of negative environmental impacts as well as impacts on biodiversity, surrounding areas, and cultural heritages are important elements in attaining necessary licenses from NVE.</li> <li>Companies need to complete an EIA and to demonstrate alignment with the EU Water Framework Directive (WFD). Minimum requirements include minimum water flows,</li> </ul>	Likely partly aligned.

<sup>38</sup> The life-cycle GHG emissions are calculated using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067, ISO 14064-1, the G-res tool. Quantified life-cycle GHG emissions are verified by an independent third party.

<sup>39</sup> <https://norsus.no/wp-content/uploads/AR-01.19-The-inventory-and-life-cycle-data-for-Norwegian-hydroelectricity.pdf>. Method used in study differ from the taxonomy.



	<ul style="list-style-type: none"> <li>ensure conditions as close as possible to undisturbed continuity in the water body the plant relates to, functional fish passes and turbines preventing fish kill, measures to ensure minimum ecological flow and sediment flow;</li> <li>reduce the impact of hydropeaking;</li> <li>protect or enhance habitats for aquatic species;</li> <li>reduce adverse impacts of eutrophication.</li> </ul> <p>2: Construction of new hydropower plants is eligible if:</p> <ul style="list-style-type: none"> <li>The plants are conceived so that no significant deterioration of the status of the water body in the same river basin district is experienced, demonstrated by a cumulative impact assessment.</li> <li>Where the cumulative impact assessment demonstrates that the envisaged project could deteriorate or compromise the achievement of good status/potential of the specific water body it relates to, a further in-depth cost-benefit assessment must be performed and show that: the beneficial objectives served by the planned hydropower plant in terms of renewable energy generation and energy storage cannot, for reasons of technical feasibility or disproportionate cost, be achieved by alternative means that would lead to a better environmental outcome; the benefits expected from the planned hydropower plant outweigh the costs from deteriorating the status of water that are accruing to the environment and to society; all technically feasible and ecologically relevant mitigation measures are included in the permit or authorisation and are implemented to reduce the adverse impacts on the status of the water body the planned hydropower plant relates to.</li> </ul>	<p>functional fish migration pathways as well as safeguards for biodiversity and local ecosystems.</p> <ul style="list-style-type: none"> <li>NVE is carrying out audits to monitor performance.</li> <li>River basin management (RBM) is conducted on a regional level, and hydropower plants need to be incorporated in the existing river basin management plans. This is regulated in the “Vanddirektivet”.</li> <li>Old hydropower plants do not have licenses but must comply with and are subject to the same laws and the same audit regime as plants with a license.</li> <li>Cumulative impact assessments are not carried out.</li> <li>According to the issuer, assessments of licenses are being conducted in the loan process.</li> </ul>	
<p>Protection and restoration of biodiversity and ecosystems (ecosystems)</p>	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening should be completed in accordance with national provisions.</li> <li>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive areas an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</li> </ul>	<ul style="list-style-type: none"> <li>The construction of energy production facilities larger than 1 MW needs a license from the NVE according to the Energy Act and the Water Resources Act.</li> <li>To receive a license the company needs to complete an EIA, including implementation of mitigative measures. This is also required by the Energy Act.</li> <li>Required improvements are being assessed by NVE and results are monitored by the bank.</li> <li>The results and conclusions in the EIA are being assessed by the bank in the loan process.</li> </ul>	<p>Likely aligned.</p>



### Transmission and distribution of electricity

Framework activity	Renewable energy		
Taxonomy activity	Transmission and distribution of electricity (NACE Code D.35.12, D.35.13)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation</li> </ul> <p>Transmission and distribution infrastructure or equipment meeting any of the following requirements are eligible:</p> <ul style="list-style-type: none"> <li>The transmission and distribution infrastructure or equipment in the system is the interconnected European system.</li> <li>The transmission and distribution infrastructure or equipment is in a system where more than 67% of newly connected generation capacity is below the generation threshold value of 100 gCO<sub>2</sub>e/kWh over a rolling five-year period;</li> <li>An average system grid emission factor is below the threshold value of 100 gCO<sub>2</sub>e/kWh measured on a life cycle basis over a rolling five-year average period;</li> <li>The transmission and distribution infrastructure or equipment is not dedicated to creating a direct connection, or expanding an existing direct connection to a power production plant that is more CO<sub>2</sub> intensive than 100 gCO<sub>2</sub>e/kWh, measured on a life cycle basis.</li> <li>A number of activities supporting development, use and integration of renewable energy (e.g. charging stations).</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer, development of new, or improvement of existing, transmissions systems (or other infrastructure) to facilitate the integration of electricity from renewable energy sources into the grid can be funded.</li> <li>Transmission lines need a license from NVE according to the Energy Act.</li> <li>Norwegian transmission and distribution infrastructure is the interconnected European system.</li> <li>The generation of electricity in Norway is mainly from renewable sources, and a Norwegian energy mix gives 18,9 CO<sub>2</sub>/kWh<sup>40,41</sup>.</li> </ul>	Likely aligned.

<sup>40</sup> [Electricity disclosure 2018 - NVE](#)

<sup>41</sup> [faktaark2018\\_03.pdf \(nve.no\)](#)



	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Transition to a circular economy (circular economy)	<ul style="list-style-type: none"> <li>A waste management plan is in place and ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy, including through contractual agreements with waste management partners, reflection in financial projections or official project documentation.</li> </ul>	<ul style="list-style-type: none"> <li>Waste is regulated in the Waste regulation (avfallsforskriften).</li> <li>For bigger transmission lines, NVE requires the development of environment-, transport- and construction plan, including waste management.</li> </ul>	Likely aligned.
Pollution prevention and control.	<p>Overground high voltage lines are eligible if:</p> <ul style="list-style-type: none"> <li>Construction site activities follow the principles of the IFC General Environmental, Health, and Safety Guidelines.</li> <li>Activities respect applicable norms and regulations to limit impact of electromagnetic radiation on human health.</li> <li>Activities do not use PCBs poly-chlorinated biphenyls.</li> </ul>	<ul style="list-style-type: none"> <li>For bigger transmission lines, NVE requires the development of environment-, transport- and construction plan, including waste management and HSE-issues.</li> <li>Electromagnetic radiation is regulated by the Regulations on Radiation Protection and Use of Radiation (strålevernfskriften).</li> <li>PCB is prohibited in transmission lines, and has been phased out since 2010.</li> </ul>	Likely aligned.
Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening should be completed in accordance with national provisions.</li> <li>Where an EIA has been carried out, the required mitigation and compensation measures for protecting the environment are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive areas additional requirements apply.</li> </ul>	<ul style="list-style-type: none"> <li>Transmission lines needs a license from the NVE according to the Energy Act.</li> <li>To receive a license the company needs to complete an EIA if needed under the Planning and Construction Act, including implementation of mitigative measures.</li> </ul>	Likely aligned.



### Urban, suburban and road passenger transport

Framework activity	Clean transportation		
Taxonomy activity	Urban, suburban and road passenger transport (NACE codes H49.31, H49.3.9 and N77.1)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation</li> </ul> <p>The activity complies with the following criteria:</p> <ul style="list-style-type: none"> <li>Zero direct (tailpipe) CO<sub>2</sub> emissions of vehicles</li> </ul>	<p>According to the issuer, loans to finance or refinance production, establishment, acquisition, expansion, upgrades, maintenance and operation of low carbon vehicles and related infrastructures:</p> <ul style="list-style-type: none"> <li><b>Low carbon vehicles:</b> Fully Electric, Hydrogen or otherwise zero-emission passenger vehicles</li> <li><b>Low carbon public and mass transportation:</b> Fully Electric or Hydrogen busses.</li> </ul>	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Transition to a circular economy (circular economy)	<ul style="list-style-type: none"> <li>Measures are in place to manage waste, in accordance with the waste hierarchy, both in the use phase (maintenance) and the end-of-life of the fleet.</li> <li>For battery-operated fleet, those measures include reuse and recycling of batteries and electronics, including critical raw materials therein.</li> <li>Vehicles of all types purchased or operated do not contain lead, mercury, hexavalent chromium and cadmium<sup>42</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Car-producers are obliged to follow EU's End of Life (ELV) directive (EU Directive 2000/53/EC), prohibiting the use of lead, mercury, hexavalent chromium and cadmium, with some exemptions for lead where substitutions are not yet available<sup>35</sup>.</li> </ul>	Likely aligned.
Pollution prevention and control	<ul style="list-style-type: none"> <li>For road vehicles of categories M (carrying passengers) and N (carrying goods), tires must comply with relevant rolling noise and energy performances<sup>43</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Regulation (EU) 2020/740 related to tires is implemented in Norway, and tire suppliers and distributors must comply with the requirements laid out in the regulation, i.a. related to labeling and testing of tires.</li> </ul>	Likely aligned.

<sup>42</sup> Except for the exemptions listed in Annex II to Directive 2000/53/EC of the European Parliament and of the Council

<sup>43</sup> External rolling noise Class A and energy performance class A or B set out in Regulation (EU) 2020/740 of the European Parliament and of the Council.



Infrastructure enabling low-carbon road transport

Framework activity	Clean transportation		
Taxonomy activity	Infrastructure enabling low-carbon road transport (NACE Codes F42.11, F42.13, F71.1, F71.20)		
Taxonomy version	EU Technical mitigation criteria	Comments on alignment	Alignment
Mitigation criteria	<ul style="list-style-type: none"> <li>Substantial contribution to climate change mitigation</li> </ul> <p>The activity complies with one or more of the following criteria:</p> <ul style="list-style-type: none"> <li>The infrastructure must be dedicated to vehicles with zero tailpipe CO<sub>2</sub> emissions; e.g., electric charging points, electricity grid connection upgrades, hydrogen fueling stations.</li> <li>The infrastructure and installations are dedicated to transshipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transshipment of goods;</li> <li>The infrastructure and installations that are dedicated to public passenger transport.</li> <li>The infrastructure cannot be dedicated to transport of fossil fuels.</li> </ul>	Loans to finance or refinance production, establishment, acquisition, expansion, upgrades, maintenance and operation of low carbon vehicles and related infrastructures.	Likely aligned.
	EU Taxonomy DNSH-criteria	Comments on alignment	Alignment
Climate change adaptation	Please see under Acquisition and ownership of buildings.		
Sustainable use and protection of water and marine resources	<ul style="list-style-type: none"> <li>Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed, in accordance with a water use and protection management plan, developed in consultation with relevant stakeholders</li> <li>In the EU, fulfill the requirements in the EU WFD or complete an EIA in line with national regulations.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>	Not applicable.
Transition to a circular economy (circular economy)	<ul style="list-style-type: none"> <li>At least 70 % (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material<sup>44</sup>) generated on the construction site is prepared for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials. Operators limit waste generation in processes related construction and demolition, in accordance with the EU Construction and Demolition Waste Management Protocol and taking into account best available techniques and using selective demolition to enable removal and safe handling of hazardous substances and facilitate re-use and</li> </ul>	<ul style="list-style-type: none"> <li>According to the issuer, they will require that the waste handling will be according to the taxonomy requirements.</li> </ul>	Likely aligned.

<sup>44</sup> Refer to the European List of Waste established by Commission Decision 2000/532/EC



	high-quality recycling by selective removal of materials, using available sorting systems for construction and demolition waste.		
Pollution prevention and control	<ul style="list-style-type: none"> <li>Measures are taken to reduce noise, dust and pollutant emissions during construction or maintenance works.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>	Not applicable.
Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"> <li>An Environmental Impact Assessment (EIA) or screening has been completed in accordance with Directive 2011/92/EU or, for activities in third countries, in accordance with equivalent national provisions or international standards.</li> <li>The required mitigation and compensation measures are implemented.</li> <li>For sites/operations located in or near biodiversity-sensitive areas an appropriate assessment, where applicable, has been conducted and based on its conclusions the necessary mitigation measures are implemented.</li> <li>Where relevant, maintenance of vegetation along road transport infrastructure ensures that invasive species do not spread.</li> <li>Mitigation measures have been implemented to avoid wildlife collisions.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable/the projects are very small and therefore do not require an EIA</li> </ul>	Not applicable.



## Appendix 3: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

